

FEB 01 2005

**BEST AVAILABLE COPY**

PTO/SB/21 (05-03)

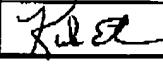
Approved for use through 04/30/2003. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>		Application Number 10/633,808
Total Number of Pages in This Submission <b>3</b>	Filing Date 08/04/2003	
	First Named Inventor Alexander V. Sokoloff	
	Art Unit 1653	
	Examiner Name Desai, Anand U.	
	Attorney Docket Number Mirus.014.04.1	

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below): _____
Remarks Reply to Restriction Requirement		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name <b>Mark K. Johnson</b>	
Signature 	
Date <b>02/01/2005</b>	

CERTIFICATE OF TRANSMISSION/MAILING		
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as express mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.		
Typed or printed name <b>Kirk Ekena</b>		
Signature 	Date <b>02/01/2005</b>	

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**BEST AVAILABLE COPY**

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/663,808

Confirmation No. 8504

Applicants : Alexander V. Sokoloff, et al.

Filed : 08/04/2003

Art Unit : 1653

Examiner : Desai, Anand U.

Docket No. : Mirus.014.04.1

Title: Compounds for Targeting Hepatocytes

Commissioner of Patents  
PO Box 1450  
Alexandria, VA 2231-1450

ELECTION TO RESTRICTION REQUIREMENT UNDER 35 U.S.C. § 121

Dear Sir:

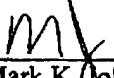
This letter responds to the Restriction Requirement dated January 26, 2005.

Applicants elect group 1 with traverse. The action states that a T7 ligand attached to a compound though a covalent bond is patentably distinct from a T7 ligand attached to a compound through a non-covalent bond. Applicants respectfully disagree. Applicants have developed a composition and method for delivering compounds to hepatocytes. In order for any ligand to direct a compound to a specific site, the ligand must be linked to the compound. The only two methods available for linking a ligand to a compound are covalent bonds and non-covalent interactions (page 3 lines 1-7). Both methods are well known in the art. Pierce Biotechnology, Inc. (Rockford, IL), for example sells a number of crosslinking reagents for linking two molecules together via both covalent and non-covalent bonds.

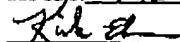
Applicants elect the species "complex" for prosecution at this time with traverse. It is the Applicants' opinion that the elected species are obvious variants of one another. Various complexes are well known in the art for delivering drugs, such as interferon, and polynucleotides to cells. These complexes include liposomes, polyplexes, and lipopolyplexes. Applicants have defined an RNA function inhibitor as a nucleic acid or nucleic acid analog (a polynucleotide) on page 17 lines 29-32. Therefore an RNA function inhibitor is an obvious variant of polynucleotide.

Applicants elect the species T7 p17 derived peptide for prosecution at this time with traverse. It is the Applicants opinion that SEQ ID NO: 1, T7 phage, T7 p17 protein, and T7 p17 derived peptide are obvious variants of one another. The T7 targeting ligand is defined in the specification as comprising a segment of the p17 protein of T7 phage that is shown to target T7 phage and other compounds to which it is attached to hepatocytes in vivo (page 2 lines 10-17 and page 8 lines 9-19). SEQ ID NO: 1 consists of a sequence from the T7 phage p17 protein and is therefore a T7 p17 derived peptide. T7 phage p17 protein is a component of the bacteriophage T7 (page 2 lines 10-17 and page 8 lines 9-19). Also, Applicants have not claimed that the T7 ligand consists of a thiol, biotin, or streptavidin. Applicants have claimed that the T7 ligand can contain a functional group, such as for attachment to a compound (page 2 lines 30-32 and page 3 lines 18-29), and that the function group can be a thiol, biotin, or streptavidin. T7 ligand-cysteine-PDP-biotin represents the linking of the functional group biotin to the T7 ligand through a thiol (cysteine) using the known crosslinker PDP. T7 ligand-PEG-biotin represents the linking of the functional group biotin to a T7 ligand through a PEG spacer.

Respectfully submitted,

  
\_\_\_\_\_  
Mark K. Johnson Reg. No. 35,909  
Mirus Bio Corporation  
505 South Rosa Road  
Madison, WI 53719  
608-238-4400

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as express mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date: 2/1/2005

  
\_\_\_\_\_  
Kirk Ekena